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School Principals' Opinions on the FATIH Project in Turkey

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Abstract

This study aims to determine the thoughts and opinions of the school principals on the FATİH Project initiated by the Ministry of Education to facilititate a technology-supported education in Turkey. 24 Principals were involved in the study. The answers of the principals received on structured interview forms that contained open-ended questions and were analysed with content analysis method. Results of the research show that a majority of the principals have positive opinion about the FATİH Project. The principals state that the FATİH Project has brought a new energy to their schools and motivated the students. Nevertheless, the principals also stated that, to enable the system to run smoothly; specialised staff are needed to be recruited to solve arisen problems immediately, for the teachers to learn how to use the interactive board, tablet PC, document camera and multipurpose printers that have been given as part of the Project, they should be provided with adequate training sessions that are extended over a year and that, although it is very important for this process, the role of IT teachers are still not clearly defined.

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Keywords: FATİH Project; school principals; interactive board; tablet PCs

1. Introduction

The fast change in the Information and Communication Technologies (ICT) have affected and transformed the societies in many ways. Many countries nowadays give importance to involving technology in the learning and teaching process in order to improve the students' technology skills and equip them with digital abilities. Being also aware of this fact, the Ministry of Education (MEB) initiated the FATİH (Turkish initials for Movement of

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Increasing Opportunities and Improving Technology) Project.

As part of the FATİH Project in Education, that is launched to promote equal opportunities in learning environments and improve the technological conditions in our schools, 570.000 classrooms in all our nursery, primary and secondary schools will be provided with LCD Interactive Panel Boards and Internet infrastructure. With this project, it is aimed to appeal more senses of students during learning process and increase the efficiency of the teaching in classrooms. Within the scope of this Project, every teacher and every student will be given a tablet PC. Meanwhile the teachers will receive in-service trainings to help them to use the IT hardwares installed in the classrooms more effectively. In this period of time, the curriculum will be tailored in accordance with the IT-supported education and educational e-materials will be created. The FATİH Project is focused on providing five main components:

1. Installation of Hardware and Software Infrastructure
2. Creation and Running of educational e-materials
3. Efficient use of IT in the Education Programs
4. In-service Training of the teachers
5. Attentive, Safe, Manageable and Measurable IT use

The FATİH Project is implemented by the Ministry of Education and supported by the Ministry of Transportation and planned to be completed in five years. It is targeted to complete the IT hardware and software installation, create e-material contents, update the teachers' guide books, give in-service trainings for teachers for the secondary schools in the first year, for the second primary graders in the second year and for the first primary graders and pre-schoolers in the third year (MEB 2014). Apart from these components, the FATİH Project also has stakeholders such as the students, teachers, principals and service providers.

With this Project, the Ministry of Education targets to form classrooms equipped with interactive panel boards and necessary technology where each students is provided with a tablet PC to enable the students and teachers to use these technologies effectively. For this target to be achieved, it is necessary for the school principals, who are at the position of supporting and guiding the Project, to adopt the Project and support the teachers who are the main implementers of the Project.

A literature scan shows us that studies carried upon the FATİH Project are mostly focused on the usage of the system by the students, perception of the Project by the teachers and on determining the computer literacy levels of the teachers and students (Çiftçi, Taşkaya & Alemdar, 2013; Gürol, Donmuş & Arslan, 2012; Kayaduman, Sırakaya & Seferoğlu,2011).

This study aims to determine opinions of school principals upon the utilisation of the interactive panel boards and/or tablet PCs that were distributed as part of the FATİH Project launched by the Ministry of Education to facilitate the students to receive a technology supported education.

These are the research questions addressed to the principals to be examined within the scope of this research:

1. What are the opinions of the principals upon teaching and learning practice that is supported with the technologies in question?
2. According to the principals, what are the reasons that render or hinder the use of those technologies?
3. What are the suggestions of the principals for using those technologies more efficiently?

2. Method

In this research, case study method is used. According to Yin "A case study is an empirical inquiry that investigates a phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2003). While Baxter and Jack (2008) state that the case studies give the researchers the opportunity to reply the "how" and "why" questions while investigating how the phenomenon is affected by its context. Although different case study researchers give different classifications, in this study we used the "descriptive case study" method which has been described by Yin (2003) as mentioned earlier. Therefore, the case investigated in this study is the principals' opinions regarding the interactive panel boards and tablet PCs that were distributed in the schools as part of the FATİH Project. Data gathered in this research have been analysed with content analysis, a known qualitative research paradigm.

2.1 Study Group

This research is conducted on a voluntary basis in the 2013-2014 Academic year, over 24 school principals (13 principals, 11 vice-principals; 2 of whom were women, 22 of whom were men) from different fields working in the high schools where FATİH Project is launched. The frequency and percentage rates of the principals participated in the research according to their professional seniority are given in Table 1.

Table 1: Distribution of the principals in accordance to their professional seniority

	Professional Seniority (Year)													
	1-3		4-6		7-9		10-12		13-15		15-		Total	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Principal	-	-	-	-	2	8.3	3	12.5	2	8.3	17	70.83	24	100

2.2. Data Collecting Tool

Data are collected with questionnaires containing open-ended questions. The research questions are tailored so that the opinions of the principals upon the interactive panel boards and tablet PCs, distribution and usage of which have been especially emphasized in the FATİH Project, can be revealed.

2.3. Data Analysis

The data obtained from the research have been investigated with content analysis. Fraenkel, Wallen and Hyun state that the content analysis is a research method that is flexible, systematic and reduces data. In the study, in order to assure the validity and reliability of the research and of the codes and themes, we conducted cross-checks that were defined by the researchers.

3. Findings

This section comprises the findings and comments that were obtained by analysing the questions and the answers given to those questions. Here, findings of the data analysis, the defined codings, frequency and percentage rates of the themes have been supported with striking quotations from the statements of the participants.

What are the opinions of the principals upon teaching and learning practice that is supported with the technologies in question?

The analysis of the opinions of the principals on the teaching experience supported with interactive panel boards and tablet PCs shows that the opinions were gathered around the codings of "effective learning", "saving time and productivity" and "motivation, interest and participation" (Table 2).

Table 2: Principals' opinions on the technology-supported education in question

	f	%
Learning can be more permanent and efficient through lessons taught with interactive panel board and tablet PCs.	17	70.83
Regular use of interactive panel board and tablet PCs during teaching process saves time.	12	50
Use of interactive panel board and tablet PCs in classrooms motivates the students and increase their involvement in the class.	11	45

While 70.83 % (f=17) of the principals think that the lessons taught with the support of interactive panel board and tablet PCs provide more permanent and efficient learning, 50% (f=12) of them think that the usage of interactive panel board and tablet PCs provides saving in time and 45% (f=11) of them think that using interactive panel board and tablet PCs in classrooms motivate the students and increase their involvement in the lessons.

"These technologies enable visually enriched materials to be used during the lessons and this attracts the attention of the students more …" Y1
"It attracts the students' attention, motivates them which can eventually increase their success.." Y3

Principals claim that the use of the mentioned technologies in the lessons can save the teachers time and can serve as a good tool to attract the students' attention. They also think that the technology-supported education will render both students and teachers to use the technology more efficiently and more productively.

"It saves teachers time, hence they can teach or revise more subjects and it also attracts interest and attention of the students better..." Y10
"It helps students and teachers to use the technology more efficiently and more productively." Y2

According to the principals, what are the reasons that render or hinder the use of those technologies?

The principals were asked "Are the interactive panel board and/or tablet PCs used efficiently in the schools?" (Table 3).

Table 3: Principals' opinions on the reasons that render or hinder the effective usage of those technologies

Are the interactive panel board and/or tablet PCs used efficiently in the schools?	f	%
Yes	14	58.33
No	10	41. 67

While, 58.33 % (f=14) of the principals think that the technologies offered with interactive panel boards and tablet PCs are not being used efficiently, 41.67 % (f=10) of them think that those technologies are adequately utilised.

Principals with positive opinion stated that the tablet PCs and interactive panel boards save teachers time in teaching their lessons and they visually support the learning process.

"Significant increase in visual materials has success-promoting benefits such as keeping the students alert." Y18
"Students' interest in the lesson increased, it allows more illustrative teaching and more productive use of time." Y21
"By means of illustrations, students' level of perception is kept high..." Y28
"They can reach visual and illustrative materials more easily. This saves time especially in lessons that require drawing." Y3

According to the principals who gave negative answer to this question, the reasons hindering the efficient usage of these technologies are mainly inadequate technical facilities (weak internet infrastructure, poor technical support, etc.), incompetence of teachers in using these technologies, negative approach of the teachers towards using technology in class, teachers remaining distant from innovative changes and poor availability of electronic lesson materials.

"...S/he cannot give up the classical teaching methods. S/he talks about innovation and change, but acts in a way opposing innovation..." Y19

"Some of our teachers enter lessons uprepared and they have lack of confidence in using these technologies and cannot pull themselves out of monotony ..." Y5

"... the biggest handicap that they do not quickly adapt themselves to the new technology and to applying this technology into their teaching." Y24

"Some of them did not use computer before and they do not want to change their habits." Y12

"Some of the teachers keep themselves distant from the technology and some of them think that the technology cause more mistakes than humanbeings." Y22

"Electronic lesson contents and materials are inadequate, teachers do not know how to use or how to prepare lessons with the available contents." Y12

The study conducted by Gürol, Donmuş and Arslan (2012) also supports the opinions of the principals who filled our questionnaire. According to this study, teachers think that, although this Project will be beneficial, it also has some problems such as inadequate resources and lack of information.

What are the suggestions of the principals for using those technologies more efficiently?

The school principals were asked "What would you suggest to make these technologies to be used more efficiently?" (Table 4).

Table 4: *Principals' thoughts on more efficient use of the technologies in question*

	f	%
Teachers should be trained to be more competent	14	58.33
Scope of the in-service training given to teachers should be revised and a hands-on training should be provided	20	83.33
Electronic lesson contents are inadequate, the number and quality of them should be increased	18	75.0
Durations of the in-service trainings given to teachers should be increased	13	54.16
Teachers should be encouraged to use the new technology	22	91.66

When we examine the opinions of the principals, we see that they mainly laid stress upon subjects such as; increasing teachers' competence, reconsidering both the content quality and durations of the in-service trainings, increasing both number and quality of the electronic lesson contents and encouraging teachers to use the new technology.

"Teachers should be given a hands-on and purpose-built training that involves more practice." Y11

"Trainings given for using the electronic contents should be increased and the teachers should be encouraged to prepare such resources. " Y22

"More efficient in-service trainings should be provided. And they should be active, hands-on training, not just theoretical. More time is needed to learn how to use the provided lesson materials. " Y29

Principals expressed that, to increase the level of usage of the FATİH Project, more training is necessary and told that the current in-service training given to develop teachers' professional abilities and technological literacy involves using only the interactive panel board and the software for a very limited time.

Most of the principals (91.66 % f=22) stated that the teachers are needed to be encouraged to use the new

technology.

"Especially teachers reached at a certain age experience great difficulties. These teachers need extra support and more practice to increase their efficiency in using the technology. MEB should promote them in this direction." Y26

4. Conclusion, Discussion and Suggestions

The aim of this study was to determine the opinions of the school principals about the FATİH Project. According to the results of this research, the principals think that the technology used in this project will effect the educational process positively on three points defined as "efficient learning", "saving time" and "motivating and increasing the interest and involvement of students". Involving devices such as the interactive panel boards that alert more sense organs of the students, in the teaching-learning environment renders more effective and permanent learning. The study of Şad and Özhan (2012) shows that giving lessons with interactive boards both saves time and provides better learning with the use of visual resources and the multimedia. Another study conducted by Gursul and Tozmaz (2010) over teachers who use interactive panel boards in their classes defines that the interactive panel boards have positive effects upon raising the interest of the students in the subject being taught.

The principals, who think that in the schools, the technologies in question are used effectively, stated that the usage of interactive boards and tablet PCs in the teaching practice, saves teachers time during giving their lessons and visually supports the students' learning. The principals who think that these technologies are not used efficiently stated that the reasons of this are the technical deficiencies and teachers' incompetency in using these technologies.

The principals stressed the significance of the electronic teaching resources for the effective use of the technologies in question and underlined that the contents of these resources are very important to be able to use the interactive boards and tablet PCs effectively in the teaching and learning process. The principals also noted the importance of the teachers' trainings and stated that increasing the number of hands-on in-service trainings is necessary. Among their suggestions to render the FATİH project to be conducted more efficiently and more productively were giving more regular and continuous in-service training, providing technical support and solving infrastructural problems. Results obtained with this study are also affirmed by other studies conducted by Günbayı and Yörük (2014), Türel (2012) with Adıgüzel, Gürbulak and Sarıçayır (2011).

As a conclusion, we suggest that by enriching the lesson contents, updating teaching materials, making in-service trainings regular and continual, the FATİH project can proceed in a more wholesome manner. Studies conducted by Günbayı and Yörük (2014); Türel (2012) and Adıgüzel; Gürbulak and Sarıçayır (2011) emphasize that teachers are needed to receive more comprehensive training to learn how to use the materials provided as part of the FATİH Project.

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